

FIG. 1

40073255, 042502

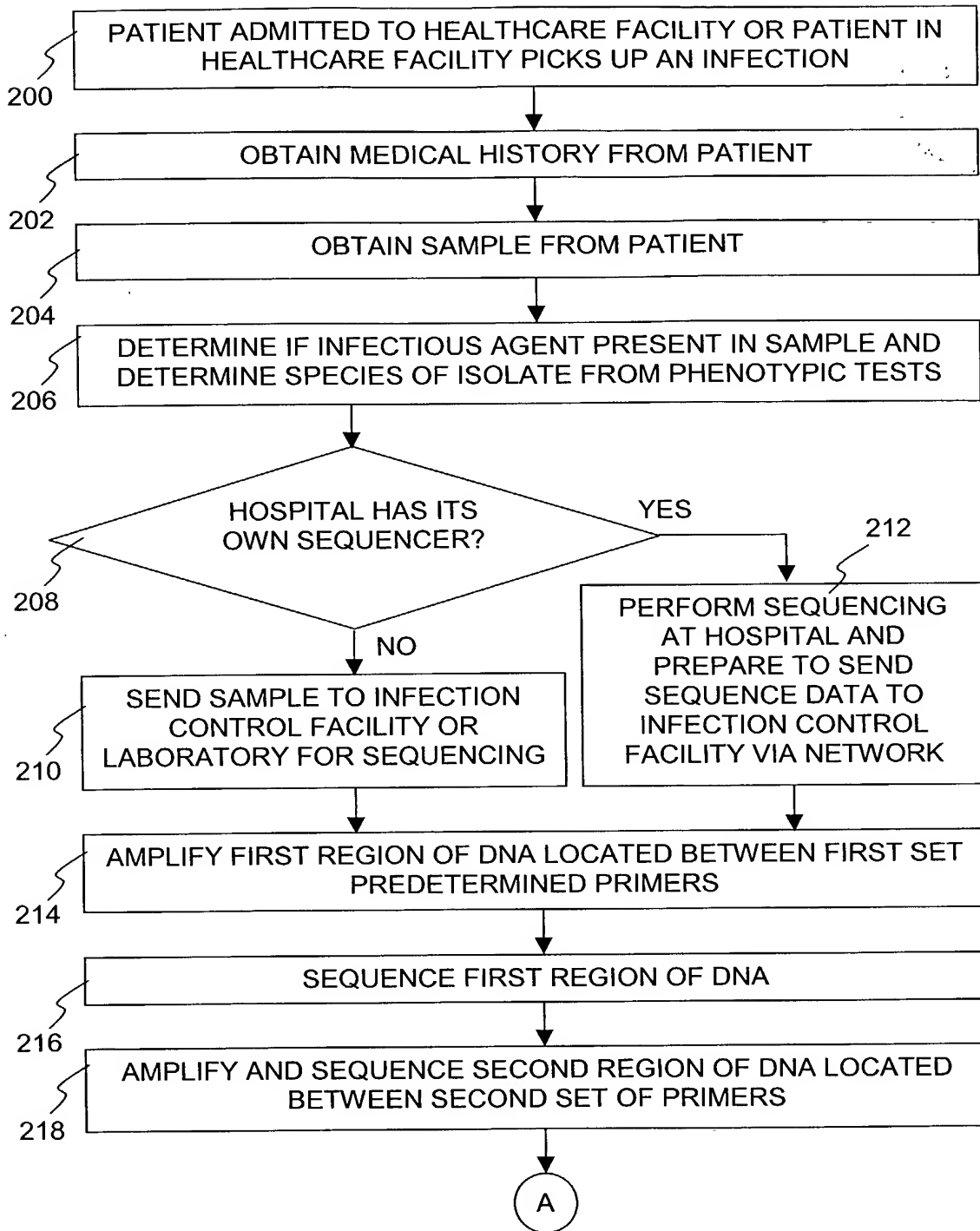
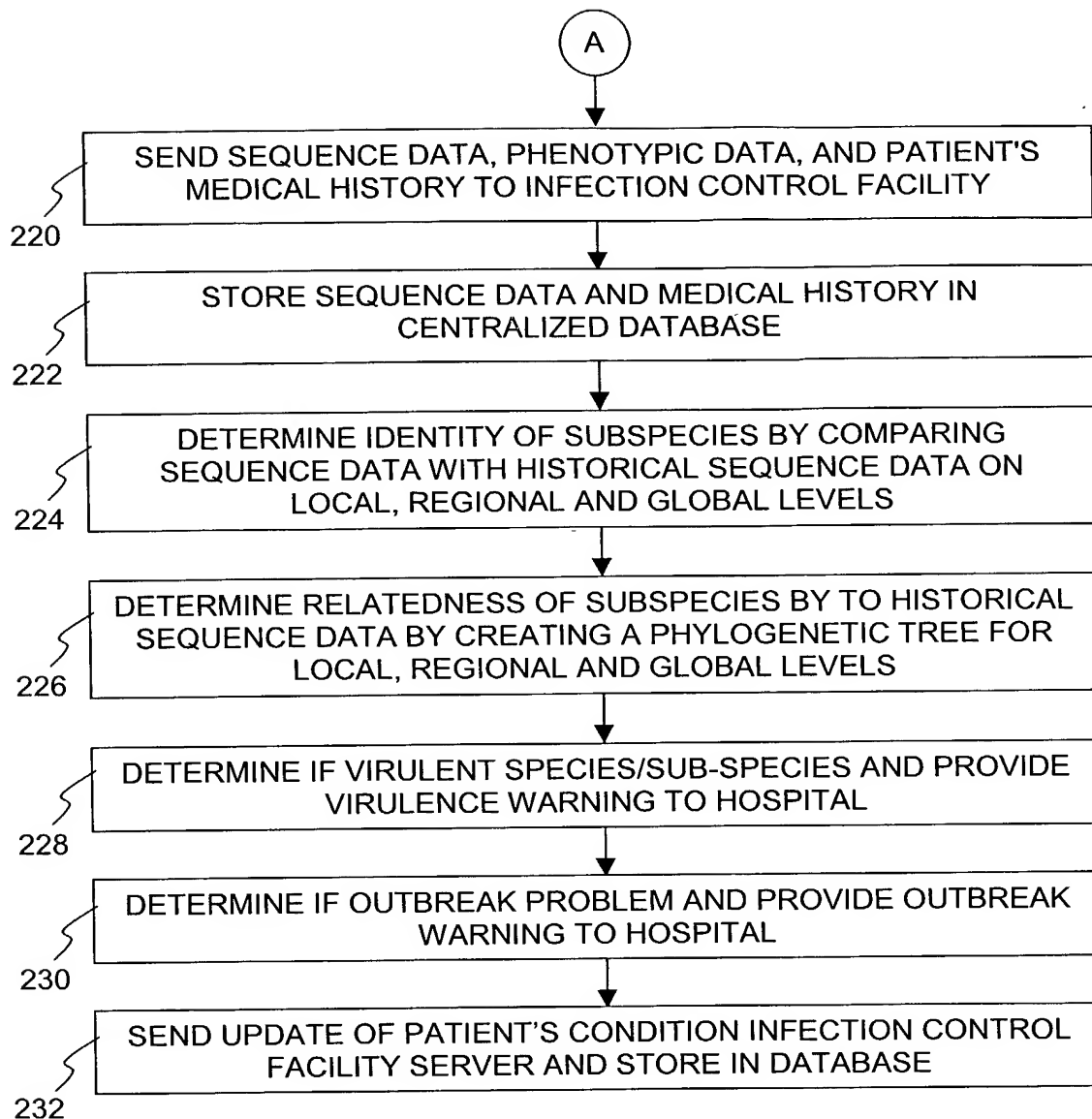
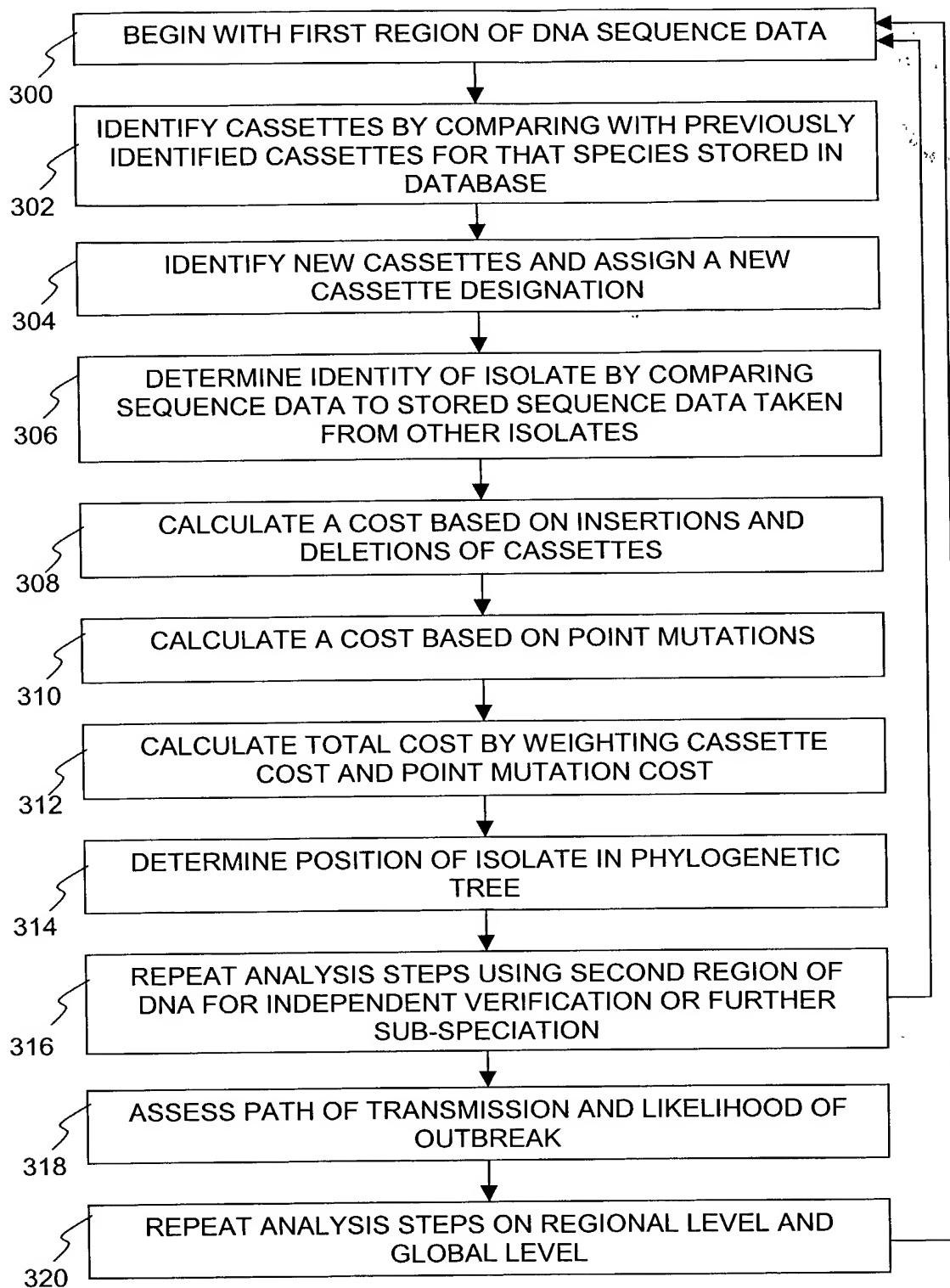


FIG. 2A

**FIG. 2B**

**FIG. 3**

400

T	GAGGAAGACAACAAAAACCTGGT
A	AAAGAAGACAACAAAAACCTGGC
B	AAAGAAGACAACAAAAACCTGGT
E	AAAGAAGACAACAACAAACCTGGT
G	AAAGAAGACAACAACAAGCCTGGT
D	AAAGAAGACAACAACAAACCTGGC
J	AAAGAAGACGGCAACAAACCTGGC
K	AAAGAAGACGGCAACAAACCTGGT
M	AAAGAAGACGGCAACAAGCCTGGT

FIG. 4A

404

GAGGAAGACAACAAAAACCTGGTAAAGAAGACGGCAACAAACCTGGCAAAGAA
 GACGGCAACAAGCCTGGTAAAGAAGACAACAACAAACCTGGTAAAGAAGACGGC
 AACAAAGCCTGGTAAAGAAGACAACAACAAACCTGGCAAAGAAGACGGCAACAAG
 CCTGGTAAAGAAGACAACAACAAGCCTGGTAAAGAAGACGGCAACAAGCCTGGT
 AAAGAAGACGGCAACAAACCTGGT

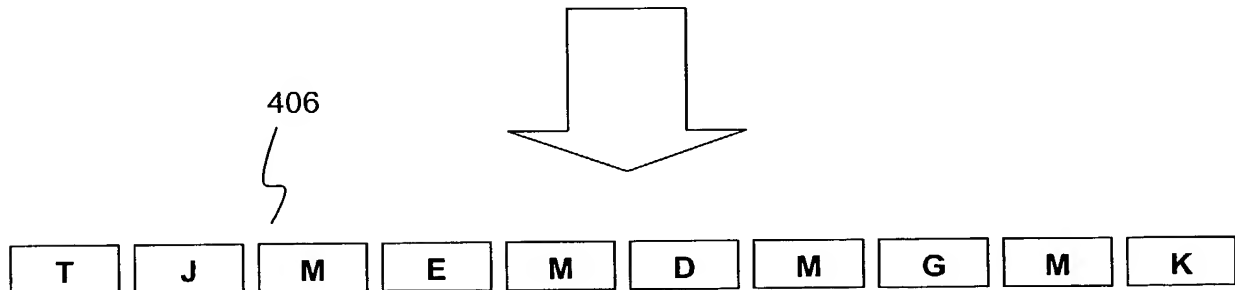


FIG. 4B

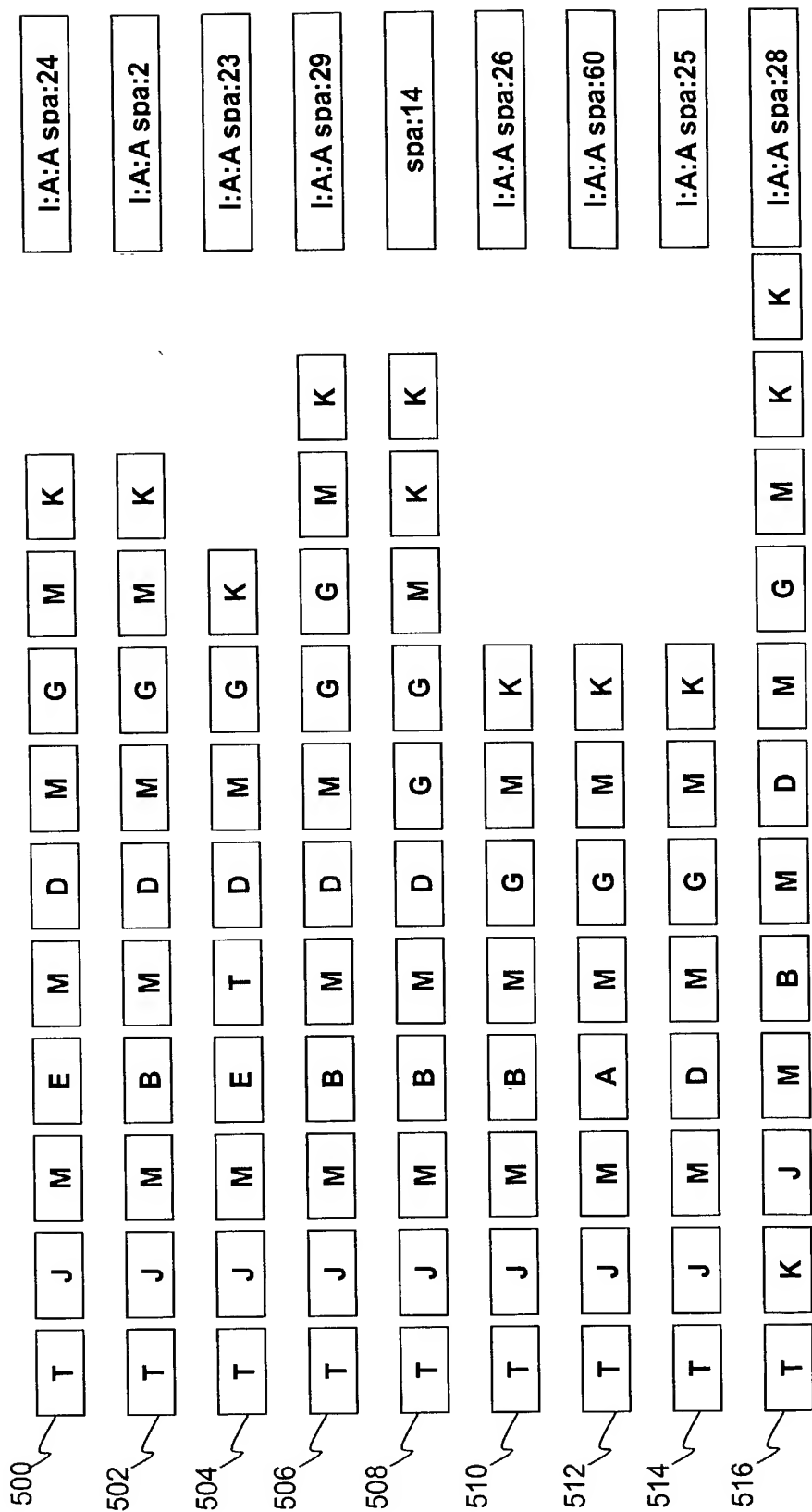


FIG. 5

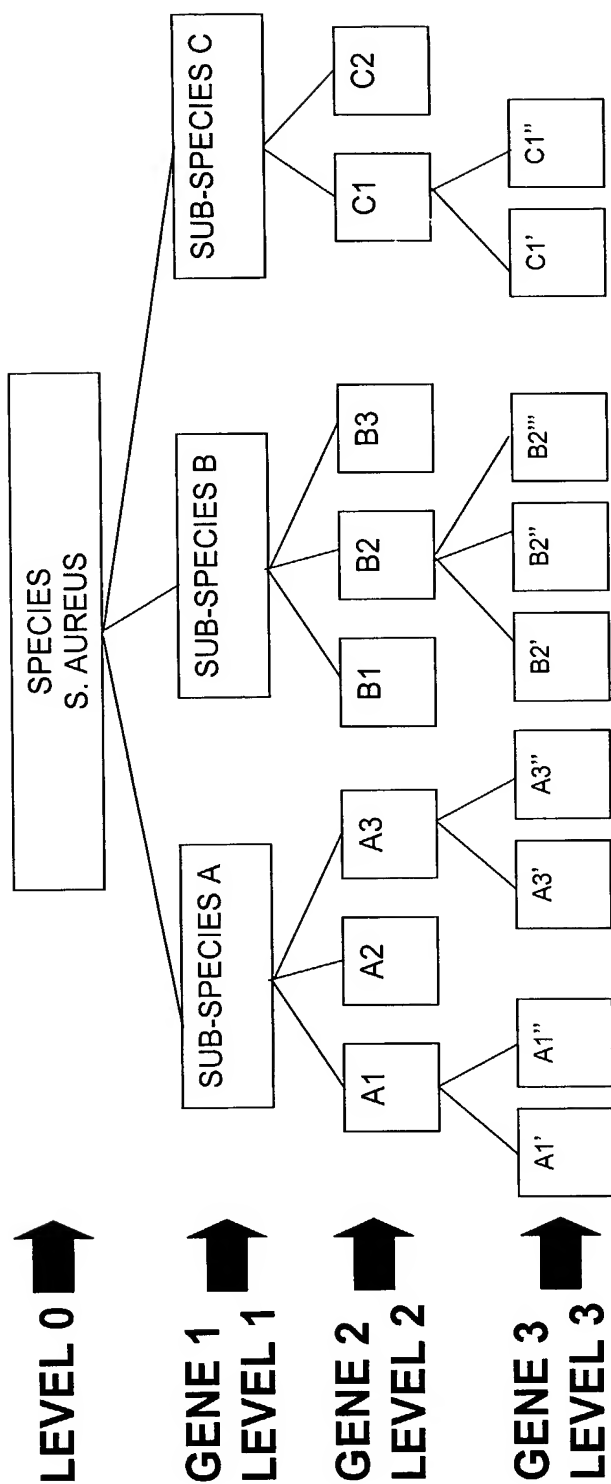


FIG. 6

SPECIES	S. aureus	S. aureus	
SUBSPECIES	A1'	B7"	
SEQ REGION 1	ATTCATAGAT...		
SEQ REGION 2	CGTACTATCC...		
SEQ REGION 3	ATTCGTTATA...		
REGION 1 PRIMERS			
REGION 2 PRIMERS			
REGION 3 PRIMERS			
REPEATS REGION 1	TKJMP..		
REPEATS REGION 2	ABABA		
REPEATS REGION 3	TYYT		
DATE	June 5, 2000		
PATIENT MEDICAL HISTORY	Hospitalized in New York Hospital, June 2000 for 3 weeks, heart surgery...		
PATIENT MEDICAL UPDATE INFO	Patient hospitalized 3 weeks for infection and released....	Patient died due to infection after two weeks...	
LOCATION	Mt. Sinai Hospital, Toronto, Burn Ward	New York City Hospital, ICU	
PHAGE TTYPE			

FIG. 7A

S. AUREUS			
SEQ REGION	REPEAT 1	REPEAT 2	REPEAT 3
PROTEIN A X _R	AATTCGCCTAGG..	AATTC ^{CC} CCTAGG..	TAGGCCGT...
REGION 2	TTAAAGGCCTGA..	GGTTCCAATAAT..	GGTTAACC..
REGION 3			

FIG. 7B

SEQ ID NO 37

TTTTCTTGGCAATTTTGGTCGTATTATCCGCTTTTTTGAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 AGTTGCTTGGTTTTCTGCTACTGATTCCCTTTGTTTGAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 TAGGATCTTGATTAGACTCTACCGCGTAAATGACA GAATTCTGGCCTTTGCTTTGGCTACTTTTCGTTTACAGTGCTT
 GGGGTGCTACTCTCACTTGTATTGTTGGTTGCGCTGGTTGTAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 ACTGGTTGTACTTGGTGTGTGCTTTCACTTTGTAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 TACTACTGGTTTCGCTGGTTGTGCTTGGCGTGTGCTTTCACTCGTACTACTGCTCTCACTTGTCTGCTTGGCGTG
 CTGCTTTTCGCTTGTATTACTGGTTTCACTTGTCTGCTTGAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 CGTGGCTTGGCGTGCTGCTTTTCGCTGGTACTACTGCTTTCACTTGTCTGCTTGAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 TGGTTTCGCTAGTTGTACTTGGTGTGTGCTTTCACTTTGTAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 TCGCTTGTATTACTGGTTTTCGCTGGTTGTGCTTGGCGTGTGCTTTCACTCGTACTACTGCTCTCACTTGTCTGCTTGGCGTG
 TGAGGTGCTGCTTTTCGCTTGTATTACTGGTTTCACTTGTCTGCTTGAAGTTCCTGACGATTCTTGATTGTCTGTATCTGTTT
 TCTCTGTTGATTTTTCACTAACAGAAAGTAA CGCCGTTTTTATGGTTTGTGTTAATTGATTAATACGCTTTTGTGCA
 TCTGCAGGCGTTTTAAAGCCACCAAGTGTGGCTCTAATAATCTTCATCTGACCAAGCAAGCAGTTGTTGTAAGT
 CTTAGAGCTTCCTTCGCCAGTTGTTGTATCTAATAAGGCTTCTTGCATGGCTTGCCAAGAGTCTTTGGT

Fig. 8A

SEQ ID NO 38

GTGCTTGGGGTGCTACTCTCACTTGTATTGTTGGTTGCGCTGGTT SEQ ID NO 24
 GTACTTGAAGCACTACTTTTCGCTGGTACTACTGTTTACTGGTT SEQ ID NO 25
 GTACTTGGTGTGTTGCTTTCACTTGTATTGCTTGTTCCTTGTGTC SEQ ID NO 26
 GTACTTGAAGTACTACTTTTCGCTGGTACTACTGTTTTCGCTGGTT SEQ ID NO 27
 GTGCTTGGCGTGTTGCTTTCACTCGTACTACTGCTCTCACTTGTGTC SEQ ID NO 28
 GTGCTTGGCGTGCTGCTTTTCGCTTGTATTACTGGTTTCACTTGTGTC SEQ ID NO 29
 GTGCTTGAAGTGTGCTTTTCGCTGGTACTACTGCTCTCACTTGTGTC SEQ ID NO 30
 GTGCTTGGCGTGCTGCTTTTCGCTGGTACTACTGCTTTCCTTGTGTC SEQ ID NO 31
 GTGCTTGAAGTACTACTTTTCGCTTGTATTACTGGTTTTCGCTAGTT SEQ ID NO 32
 GTACTTGGTGTGTTGCTTTCACTTGTATTGCTTGTTCCTTGTGTC SEQ ID NO 33
 GTGCTTGAAGTGTGCTTTTCGCTTGTATTACTGGTTTACTGGTT SEQ ID NO 34
 GTACTTGAAGTGTGCTTTTCGCTTGTATTACTGGTTTCACTGGTT SEQ ID NO 35
 GTGCTTGAAGTGTGCTTTTCGCTTGTATTACTAGTTGTCTCTGTT SEQ ID NO 36

SEQ ID NO. 23

Fig. 8B

MTEFWPLLWLLSFT
 VLGVLVSLVLLVALV SEQ ID NO 39
 VLEALLSLVLLVLLV SEQ ID NO 40
VLGVLLSFVLLVSLV SEQ ID NO 41
 VLEVLLSLVLLVSLV SEQ ID NO 42
 VLGVLVSLVLLVSLV SEQ ID NO 43
 VLGVLVSLVLLVSLV
 VLEVLLSLVLLVSLV SEQ ID NO 44
 VLGVLVSLVLLVSLV SEQ ID NO 45
 VLGVLVSLVLLVSLV
 VLGVLVSLVLLVSLV
 VLEVLLSLVLLVLLV SEQ ID NO 46
 VLGVLVSLVLLVSLV SEQ ID NO 47
VLEVLLSLVLLVSLV
 VLEVLLSLVLLVSV SEQ ID NO 48
 DFSTNRSNAVFMVCVN

Fig. 8C

SEQ ID NO 51

ATGTTCCAGCCCCATTAGACGCTTATACAGACAGCACCCGTTTAGATGAAACCGATTATAAGCCCCCAATTAAATAT
 AGCCCTAGCCAATTGGTGGCCTTTGGATAAAAAGAGAAAAGCAAAGGGTTTAGGCGTTTTATCTTGTATTTTCATCTTAA
 GCCAACGCTACACAATCACCCCTCCACCAAAAACCTAACGAACCTCCGATCTTGTCTTTGGCAGTCCTATTGGATCA
 GCCAGAAAAATCCTATCCTATCAAAACACTAAAAGGGTGTTTTACACCGGTGAAAATGAAGTCCCTAATTTCAATCT
 CTTTGATTACGCCATAGGCTTTGATGAATTGGACTTTAGAGATCGTTATTTGAGAATGCCTTTATATTACGCTAGCT
 TGCATTATAAAGCCGAGAGCGTGAAATGACACCACCGCGCCCTACAAACTCAAAGACAACAGCCTTTATGCTTTAAAA
 AAGCCCTCCCATCATTTTAAAGAAAACCACCCTAATTTATGCGCAGTAGTGAATGATGAGAGCGATCCTTTGAAAAG
 AGGGTTTTCGAGCTTTGTTCGCGAGCAACCCTAACGCTCCTATAAGGAACGCTTCTATGACGCTTTAAATTCTATTG
 AGCCAGTTTACTGGGGGAGGGAGCGTGAAAAACACTTTAGGCTATAACGTCAAAAACAAGAGCGAGTTTTTAAGCCAA
 TACAAATTCAATCTGTGTTTTGAAAACACTCAAGGCTATGGCTATGTAAGTAAAAAATCATTGACGCTTATTTTCAG
 CCACACCATTCCCATTTATTTGGGGGAGTCCTAGCGTGCGGAAAGACTTTAACCCTAAGAGTTTTGTGACGTTTGTG
 ATTTTAAAAACTTTGATGAAGCGATTGATTACGTGAGATACCTTCACACGCACCCAAACGCTTATTTAGACATGCTC
 TATGAAAACCCTTTAAACACCCTTGATGGGAAAGCTTACTTTTACCAAAATTTGAGTTTTAAAAAATCCTAGATTT
 TTTTAAAACGATTTTAGAAAACGACACGATCTATCACGATAACCCCTTTCATTTTCTATCGCGATTTGAATGAGCCTT
 TAGTAGCTATTGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGAT
 GATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAA
 TTATGATCGCCTTTTACAAAACGCTTCGCCTTTATTAGAACTCTCTCAAAAACACCACTTTTAAAATCTATCGCAAAG
 CCTATCAAAAATCCTTACCTTTGTTGCGCACCATAAGGAGATGGGTAAAAAATATAA

Fig. 9A

SEQ ID NO 52

SEQ ID NO 59

GATGATTTGAGGGTTAATTAT SEQ ID NO 50
 GATGATTTGAGGGTTAATTAT
 GATGATTTGAGGGTTAATTAT
 GATGATTTGAGGGTTAATTAT
 GATGATTTGAGGGTTAATTAT
 GATGATTTGAGGGTTAATTAT

Fig. 9B

DLRVNYD SEQ ID NO 53
 DLRVNYD
 DLRVNYD
 DLRVNYD
 DLRVNYD
 DLRVNYD
DLRVNYD

Fig. 9C

SEQ ID NO 54

AATAATGAGAATGTTGTACGTTATGGTGGTGGAAAGTGCTGATGGTGATTCAGCAGTAAATCCGAAAGACCCAACTCC
 AGGGCCGCGCGTTGAC
 CCAGAACCAAGTCCAGACCCAGAACCAGAACCAACG
 CCAGATCCAGAACCAAGTCCAGACCCAGAACCAGGAA
 CCAAGCCAGACCCGGATCCG
 GATTCGGATTTCAGACAGT SEQ ID NO 55
 GACTCAGGCTCAGACAGC SEQ ID NO 56
 GACTCAGGTTTCAGATAGC SEQ ID NO 57
 GACTCAGAATCAGATAGC SEQ ID NO 58
 GATTCGGATTTCAGACAGT
 GATTCAGATTTCAGACAGC SEQ ID NO 59
 GACTCAGAATCAGATAGC
 GATTCAGAATCAGATAGC SEQ ID NO 60
 GACTCAGATTTCAGATAGC SEQ ID NO 61
 GATTCAGATTTCAGATAGC SEQ ID NO 62
 GATTCAGATTTCAGATAGC
 GATTCGGATTTCAGACAGT
 GATTCAGATTTCAGACAGC
 GACTCAGAATCAGATAGC
 GACTCAGAATCAGATAGT SEQ ID NO 63
 GAGTCAGATTTCAGACAGT SEQ ID NO 64
 GACTCGGACTCAGACAGT SEQ ID NO 65
 GATTCAGACTCAGATAGC SEQ ID NO 66
 GATTCAGACTCAGATAGC
 GATTCAGATTTCAGACAGC
 GACTCAGATTTCAGACAGC SEQ ID NO 67
 GACTCAGACTCAGATAGC SEQ ID NO 68
 GACTCAGACTCAGACAGC SEQ ID NO 69
 GACTCAGATTTCAGATAGC
 GATTCAGACTCAGACAGC SEQ ID NO 70
 GACTCAGACTCAGACAGC
 GACTCAGACTCAGATAGC
 GACTCAGATTTCAGATAGC
 GATTCAGACTCAGACAGC
 GACTCAGATTTCAGATAGC
 GATTCGGACTCAGACAGC SEQ ID NO 71
 GATTCAGATTTCAGACAGC
 GACTCAGACTCGGATAGC SEQ ID NO 72
 GATTCAGATTTCAGATAGC
 GATTCGGATTTCAGACAGT
 GATTCAGATTTCAGACAGC
 GACTCAGACTCGGATAGC
 GACTCAGACTCAGACAGC
 GATTCAGACTCAGATAGC
 GACTCAGACTCGGATAGC
 GACTCGGATTTCAGATAGC SEQ ID NO 73
 GACTCAGACTCAGATAGT SEQ ID NO 74
 GACTCCGATTCAAGAGTT SEQ ID NO 75
 ACACCACCAATAATGAACAGAAAACACCAAACTGATGCTTTACCA

Fig. 10B

Repeat pattern isolate 1:

1-2-3-4-1-5-4-6-7-8-8-1-5-4-9-10-11-12-12-5-13-14-15-7-16-15-14-7-16-7-17-5-18-8-1-5-18-15-12-18-19-20-21

Fig. 10E

TCAGCAGTAAATCCGAAAGACCCAACTCCAGGGCCGCCGGTTGACCCAGAACCAAGTCCAGACCCAGAACCAGAACC
AACGCCAGATCCAGAACCAAGTCCAGACCCAGAACCAGGAACCAAGCCAGACCCGGATCCG
GATTCGGATTTCAGACAGT
GACTCAGGCTCAGACAGC
GACTCAGGTTTCAGATAGC
GACTCAGAATCAGATAGC
GATTCGGATTTCAGACAGT
GATTCAGATTTCAGACAGC
GACTCAGAATCAGATAGC
GATTCAGAATCAGATAGC
GACTCAGATTTCAGATAGC
GATTCAGATTTCAGATAGC
GATTCAGAATCAGATAGC
GATTCGGATTTCAGACAGT
GATTCAGATTTCAGACAGC
GACTCAGAATCAGATAGC
GACTCAGAATCAGATAGT
GAGTCAGATTTCAGACAGT
GACTCGGACTCAGACAGT
GATTCAGACTCAGATAGC
GATTCAGACTCAGATAGC
GATTCAGACTCAGACAGC
GATTCAGATTTCAGACAGC
GACTCAGAATCAGACAGC
GACTCAGACTCAGATAGC
GACTCAGACTCAGACAGC
GACTCAGATTTCAGATAGC
GATTCAGACTCAGACAGC
GACTCAGACTCAGACAGC
GACTCAGACTCAGATAGC
GATTCAGACTCAGACAGC
GACTCAGATTTCAGATAGC
GATTCGGACTCAGACAGC
GATTCAGATTTCAGACAGC
GACTCAGACTCGGATAGC
GATTCAGATTTCAGACAGC
GACTCAGACTCGGATAGC
GACTCGGATTTCAGATAGT
GACTCCGATTCAAGAGTT

SEQ ID NO 79

SEQ ID NO 80

ACACCACCAAATAATGAACAGAAAGCACCATCAAATCCTAAAGGTGAAGTAAACCATTCTAATAAGGTATCAAAACA
ACACAAAACCTGATGCTTTACCAGAAACAGGAGATAAGAGCGAAAAACACAAATGCAACTTTATTTGGTGCAATG

Fig. 10C

Repeat pattern isolate 2:

1-2-3-4-1-5-4-6-7-8-6-1-5-4-9-10-11-12-12-16-5-22-14-15-7-16-15-14-16-7-17-5-18-5-18-23-21

Fig. 10F